## **ABSTRACT**

An acoustic pick-up, particularly an ultrasonic pick-up for acoustically diagnosing machines, for example, for detecting leakage in valves or for diagnosing positions, comprising a piezoelectric measuring element and an electronic circuit that processes the measurement signal into a form that is suited for transmission to an evaluation device. In order that the acoustic pick-up can function without an external auxiliary power supply, means are provided by means of which auxiliary power required for operating the electronic circuit can be generated from the acoustic signal to be picked up.